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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,210	02/17/2000	Hiroshi Maeda	49565(904)	6833
21874	7590	06/14/2005	EXAMINER	
EDWARDS & ANGELL, LLP			POON, KING Y	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	
			2624	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,210

Applicant(s)

MAEDA, HIROSHI

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-7,9 and 11-16 is/are allowed.
- 6) ☒ Claim(s) 3 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2000 and 07 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/28/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (US 5,611,024) in view of Warmus et al (US 5,963,968) and Hisatake (US 5,220,440).

Regarding claim 3: Campbell teaches an image-processing apparatus (printer, column 5, line 45, fig. 1) comprising: a storing section (column 6, lines 30-32) having a storing area for storing image data that has been compressed (column 6, lines 20-21) and divided (data unit, column 8, lines 60-63), and an image processing control section (the controller that controls the printer to perform the function of column 6, lines 15-32) that is configured and arranged so as to preprocess the image data (modified, column 6, lines 29-32), so as to compresses and divide the preprocessed image data and to store the compressed and divided image data in the storing section, (stored image data) (column 6, lines 30-32), so as to combine and decompress the stored image data, so as to perform image processing on the combined and decompressed stored image data (column 6, lines 23-25 teaches to modified a stored compressed bit map data, and column 6, lines 30-32 teaches the modified compressed bit map data again become a stored compressed bit map data) so as to compress and divide the processed image

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data and to store the compressed and divided processed image data in the storing section.

Campbell does not teach a judgment section configured and arranged to make a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the compressed and divided process image data.

Hisatake, in the same area of storing compressed image data, teaches it is advantage and well known in the art to make a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the compressed image data (column 4, lines 46-51, column 6, lines 55-65).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Campbell to include: a judgment section configured and arranged to make a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the compressed and divided process image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Campbell by the teaching of Hisatake because it does not made sense to store the data into a memory is not capable of storing the data and it would have prevented Campbell's invention from breaking down due to storing image data into a memory that can not store the image data.

Campbell also does not teach wherein the image processing includes a combining process for main image data and sub image data of the image data, and

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wherein the pre-processing including a process for adding to the main image data a blank section to which the sub image data is inserted.

Warmus, in the same area of image processing and printing, teaches wherein the image processing includes a combining process for main image data and sub image data of the image data (139, fig. 5, fig. 7a, column 7, lines 5-20), and wherein the pre-processing including a process for adding to the main image data a blank section (113, column 7, lines 15-20, column 7, lines 55-65) to which the sub image data is inserted.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Campbell to include: wherein the image processing includes a combining process for main image data and sub image data of the image data, and wherein the pre-processing including a process for adding to the main image data a blank section to which the sub image data is inserted.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have applied Campbell's invention to the invention of Warmus because it would have saved Warmus system a lot of memory during the preprocessing and processing stage of Warmus invention, and it would also benefit Campbell by allowing other application to utilized his image processing and storing technique.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (US 5,611,024) in view of Warmus et al (US 5,963,968) and Takemoto (US 5,841,547).

Regarding claim 10: Campbell teaches an image-processing apparatus (fig. 1), which comprises an image-processing means (the program or device that is modifying the bitmap image data, column 6, lines 25-32) for carrying out an image processing on stored image data, which image processing apparatus compresses and divides (column 6, lines 15-32, column 8, lines 59-63, divided into data unit) the image data so as to be stored in a storing means (column 6, lines 20-21) in a divided manner, and which combines the group of the stored, divided and compressed processed mage data, and decompresses and restores the stored; divided and compressed processing image data so as to be output (column 6, lines 33-40).

Campbell does not teach a pre-processing means which, upon having an instruction for an image-processing involving an image combining process and an edition for collecting images corresponding to a plurality of pages into one page, carries out a pre-processing for allowing preprocess mage data of an image forming a subject for the combining process to preliminarily possess a blank section, the blank section corresponding to a location to which the image to be combined is to be inserted, and following such preprocessing the image processing apparatus compressing, dividing and storing the preprocessed data in the storing means as the stored image data.

Warmus, in the same area of image processing and printing teaches a pre-processing means (the control program or device that performs the function describe in column 7, lines 60-67) which, upon having an instruction for an image-processing involving an image combining process and an edition for collecting images corresponding to a plurality of pages into one page (fig. 7a, column 7,lines 10-20),

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carries out a pre-processing for allowing preprocess mage data of an image forming a subject for the combining process to preliminarily possess a blank section, the blank section corresponding to a location to which the image to be combined is to be inserted, and following such preprocessing the image processing apparatus stored the preprocessed data in the storing means as the stored image data (stored as file, column 7, lines 65-67).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Campbell to include: a pre-processing means which, upon having an instruction for an image-processing involving an image combining process and an edition for collecting images corresponding to a plurality of pages into one page, carries out a pre-processing for allowing preprocess mage data of an image forming a subject for the combining process to preliminarily possess a blank section, the blank section corresponding to a location to which the image to be combined is to be inserted, and following such preprocessing the image processing apparatus compressing, dividing and storing the preprocessed data in the storing means as the stored image data.

It also would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Warmus to include: following such preprocessing, providing an image processing apparatus for compressing, dividing and storing the preprocessed data in the storing means as the stored image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have applied Campbell's invention to the invention of

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Warmus because it would have saved Warmus system a lot of memory during the preprocessing and processing stage of Warmus invention, and it would also benefit Campbell by allowing other application to utilized his image processing and storing technique.

Warmus/Campbell also do not teach a center binding edition.

Takemoto, in the same area of booking binding teaches a center binding edition.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Warmus/Campbell to include: a center binding edition.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Warmus/Campbell by the teaching of Takemoto because it would have create a new product for the combined system of Warmus and Campbell to increase sale, to attract more buyer and the bottom line - to bring more profit as well as having more satisfied customers.

Allowable Subject Matter

4. Claims 1, 2, 4-7, 9, 11-16 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 3, and 10 have been considered but are moot in view of the new ground(s) of rejection. Please see detailed office action.

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6. Applicant's arguments with respect to claims 1, 2, 4-7, 9, 11-16 are persuasive; therefore, claims 1, 2, 4-7, 9, 11-16 are allowed.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

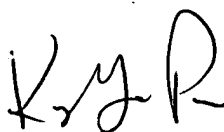
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 11, 2005

A handwritten signature in black ink, appearing to read 'K Y R', is positioned above the printed name and title.

**KING Y. POON
PRIMARY EXAMINER**